

# Partnership for Progress HOV TO HOT



## Public Hearing Open House (PHOH)

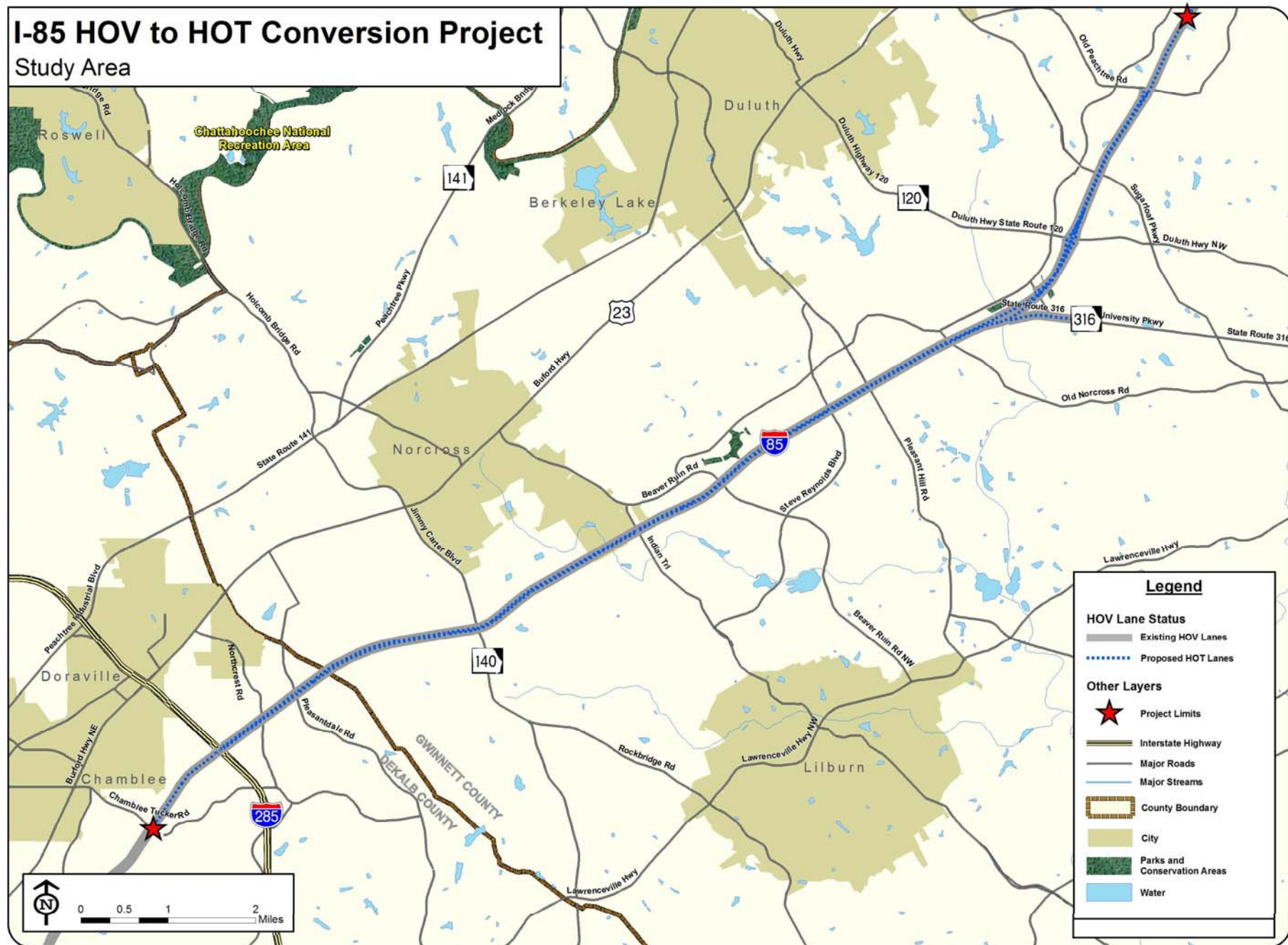
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November 12, 2009



# I-85 HOV to HOT Conversion Project

## Study Area





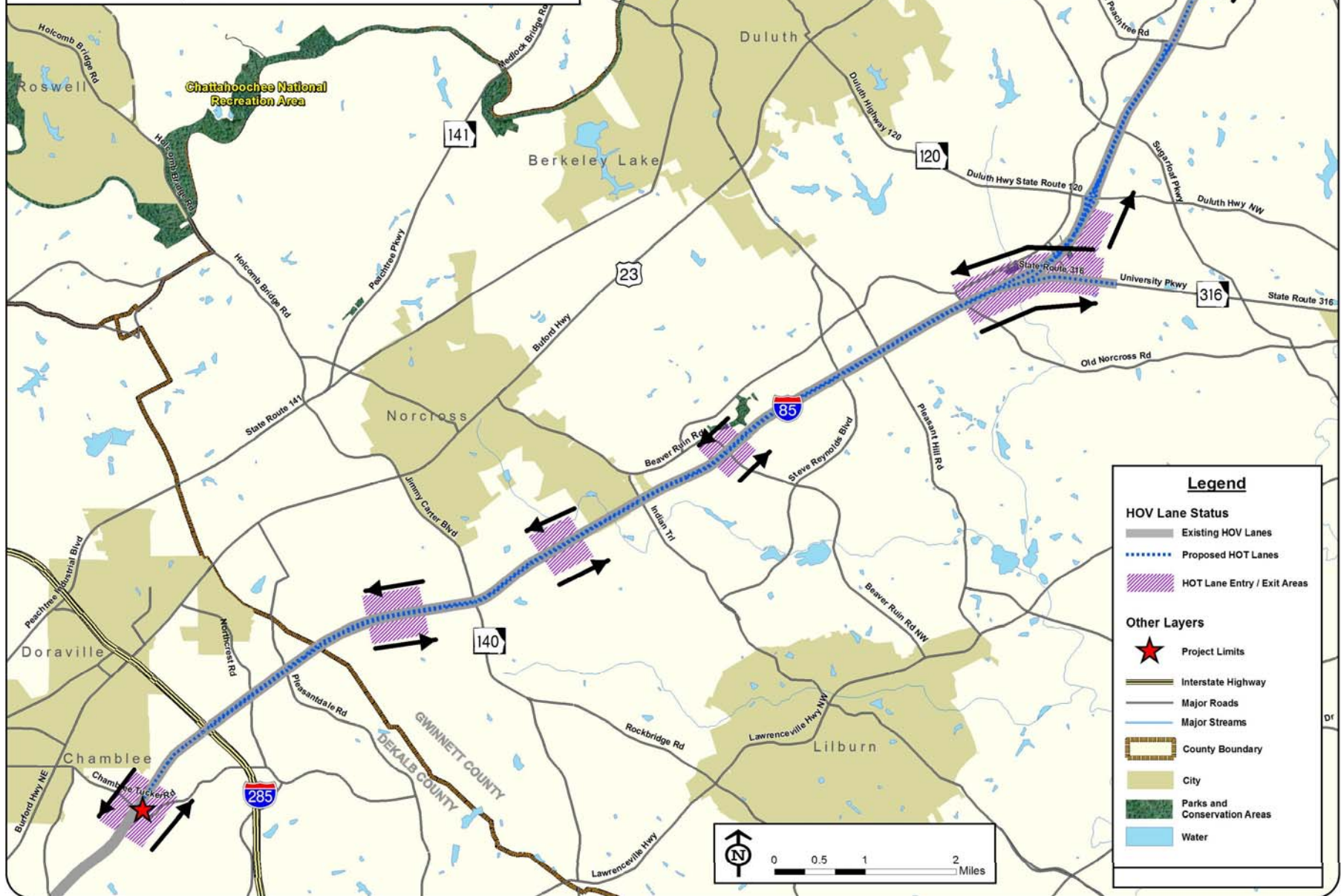
# I-85 HOV to HOT Conversion Project

Congestion Along I-85



# I-85 HOV to HOT Conversion Project

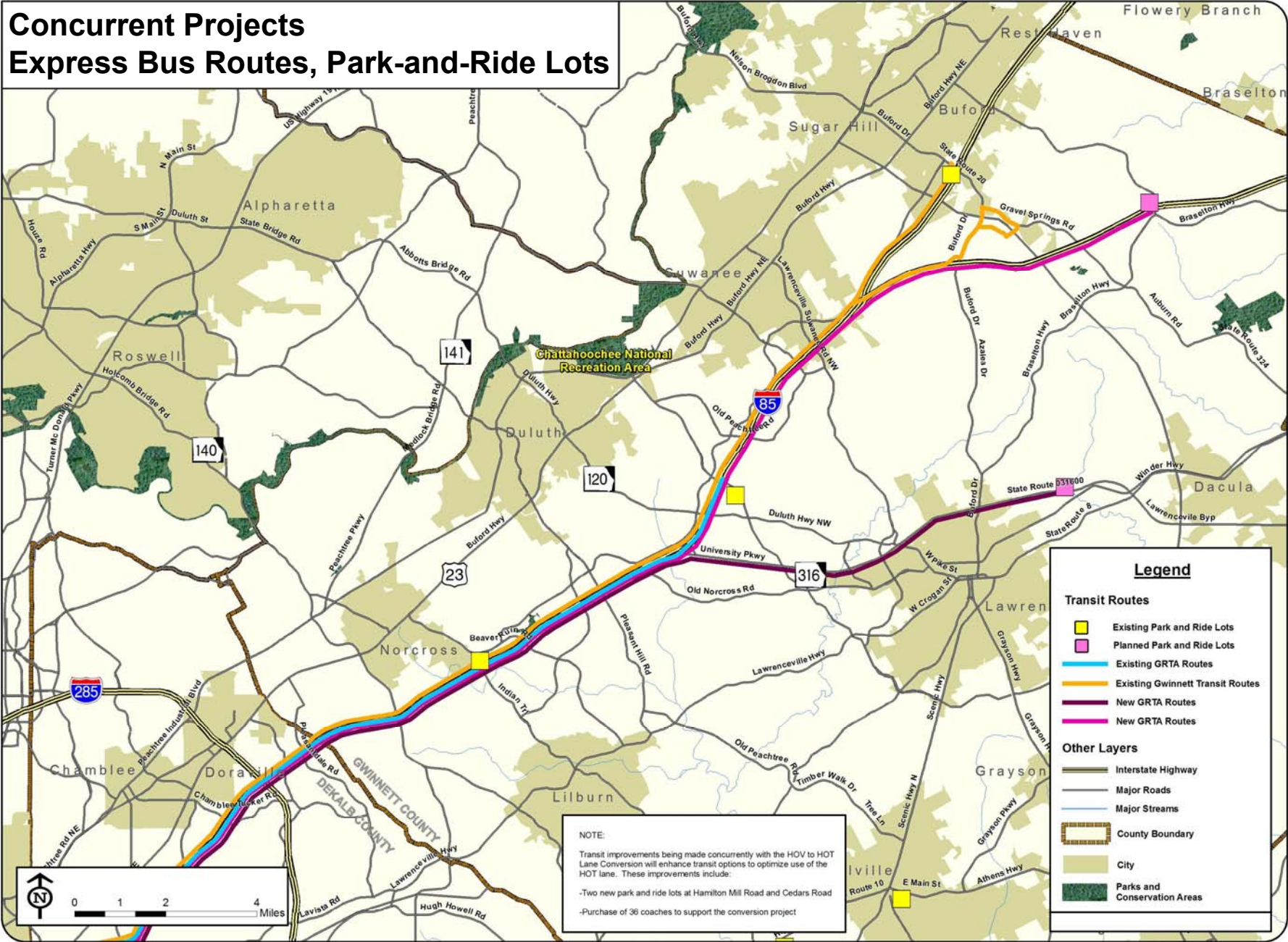
## HOT Lane Entry / Exit Areas





# Concurrent Projects

## Express Bus Routes, Park-and-Ride Lots





# How Reliable is Your Current Trip?

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- **Factors that make travel less reliable**
  - Traffic congestion due to high volumes
  - Incidents (crashes and breakdowns)
  - Poor weather conditions
- **Trip Reliability – Will your trip take the expected amount of time?**
- **I-85 drivers in General Purpose Lane (GPL) must plan additional time**
  - AM peak hour trips take 80% longer than off-peak trips (southbound)
  - PM peak hour trips take over twice as long as off-peak trips (northbound)



# Defining Terms

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- **Congestion:** A condition on networks that occurs as vehicle use increases, and is characterized by slower speeds, longer trip times, and increased queuing.
- **Dynamic Pricing:** Tolls that vary in real time in response to changing congestion levels, as opposed to pricing that follows a fixed schedule. This technique will be used to determine toll rates in the HOT lanes based on the traffic in the HOT Lane and general purpose lanes in order to keep the HOT lanes moving.
- **HOT Lane:** A HOT (High Occupancy Toll) lane utilizes the HOV lane by charging a toll on vehicles with less than the minimum requirement of occupants as a way of offering a free-flow option to bypass congested areas along the roadway. Current proposal is for 3 or more occupants to ride toll-free.
- **HOV Lane:** A HOV (High Occupancy Vehicle) lane is a designated managed lane or facility for exclusive use by vehicles with more than one occupant and certain other qualified vehicles. Current lane is restricted to 2 or more occupants.

A vertical strip on the left side of the slide shows a city skyline at night with illuminated buildings and a curved road in the foreground.

# Defining Terms

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- **Managed Lane:** A lane or lanes designed and operated to achieve stated goals by managing access via user group, pricing, or other criteria. A managed lane facility typically provides improved travel conditions to eligible users.
- **Transponder:** An electronic tag mounted on or built into a vehicle. The tag is read electronically by an electronic tolling device that automatically assesses the amount of the user fee.
- **Travel Time Reliability:** A consistency or dependability in travel times, as measured from day to day or across different times of day.
- **Variable Pricing:** Pricing of tolls that vary by time of day, level of traffic congestion, or other factors.



# HOT 3+ - A Different Concept for the Managed Lanes

## HOV Lane Congestion is Growing

- From 2008, HOV lane volumes are anticipated to grow 6% through 2011, 8% by 2012, and 56% by 2031.



## What does this mean?

- By 2012, HOV lanes will exceed the effective lane capacity during peak traffic.
- As HOV congestion increases, the lanes will not offer reliable travel times.

## Traditional HOV Solution would be Underutilized

HOV 3+ lanes:

- Would have reliable travel times
  - Would have peak hours speeds averaging 50+ mph
  - Lane would be under 30% filled overall - underutilized
- General purpose lanes have no option for reliable travel.

## HOT 3+ increases utilization of lane

- Provides reliable travel times with peak hour speeds averaging 45+ mph.
- Volume optimized through lane pricing.
- Most users of I-85 have option for reliable travel time.

# HOT 3+ - A Different Concept for the Managed Lanes

All vehicles must pre-register to ride in the HOT lanes.

Vehicle classifications eligible to use the I-85 HOT lanes without incurring a toll would be:

- Passenger vehicles with three or more occupants
- Transit Buses
- On-call emergency vehicles
- Motorcycles
- Vehicles with alternative-fuel vehicles (AFVs) license plates

Vehicles eligible to use the I-85 HOT lanes for a toll would be:

- Two-person occupancy vehicle
- Single occupancy vehicles (SOV)

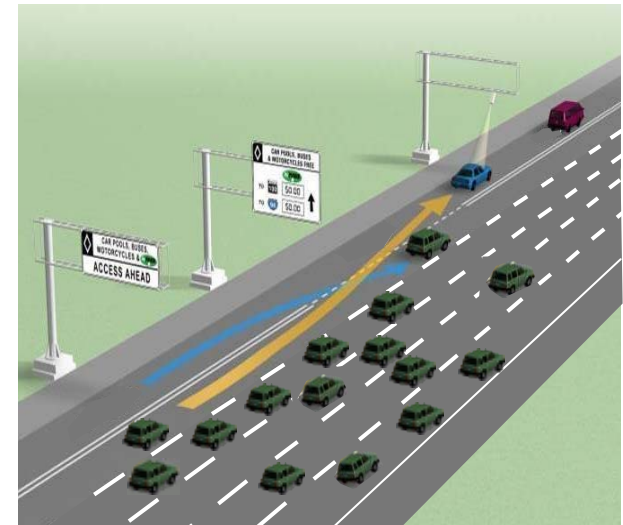


Illustration of HOT Lane





# Summary of Draft Environmental Assessment

IN COMPLIANCE WITH THE 1969 NATIONAL ENVIRONMENTAL POLICY ACT

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## **There would be no adverse effects to the social environment.**

- No direct or indirect land use changes
- No residential or business displacements
- No adverse effect to churches or institutions
- No effect on community cohesion
- Would not disproportionately adversely affect low-income or minority populations

## **There would be no effect to the cultural environment.**

- No effect to historic or archaeological properties
- No effect to cemeteries
- No adverse impacts to parklands, recreation areas, or wildlife refuges

**No environmental permits, variances, or mitigation would be required for construction of the project.**



# Summary of Draft Environmental Assessment

## IN COMPLIANCE WITH THE 1969 NATIONAL ENVIRONMENTAL POLICY ACT

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### **There would be no adverse effects to the natural environment.**

- No effect to water quality or water consumption
- No Waters of the US involvement
- No significant encroachment on any floodplains or regulatory floodways
- No farmland involvement
- No effect on any threatened or endangered plant or wildlife species
- Construction of the project would have no effect on neotropical/migratory bird species

### **There would be no adverse effects to the physical environment.**

- Not a project type that would result in traffic noise effects
- Would not exceed state and federal air quality standards, and it is consistent with the State Implementation Plan for the attainment of clean air quality in the state
- No effect on energy or mineral resources
- Unavoidable inconveniences to motorists would be minimized during construction
- Would not effect sites potentially contaminated by leaking underground storage tanks or hazardous waste



A vertical strip on the left side of the slide shows a city skyline at night with illuminated buildings and light trails from traffic.

# Pricing and Toll Range

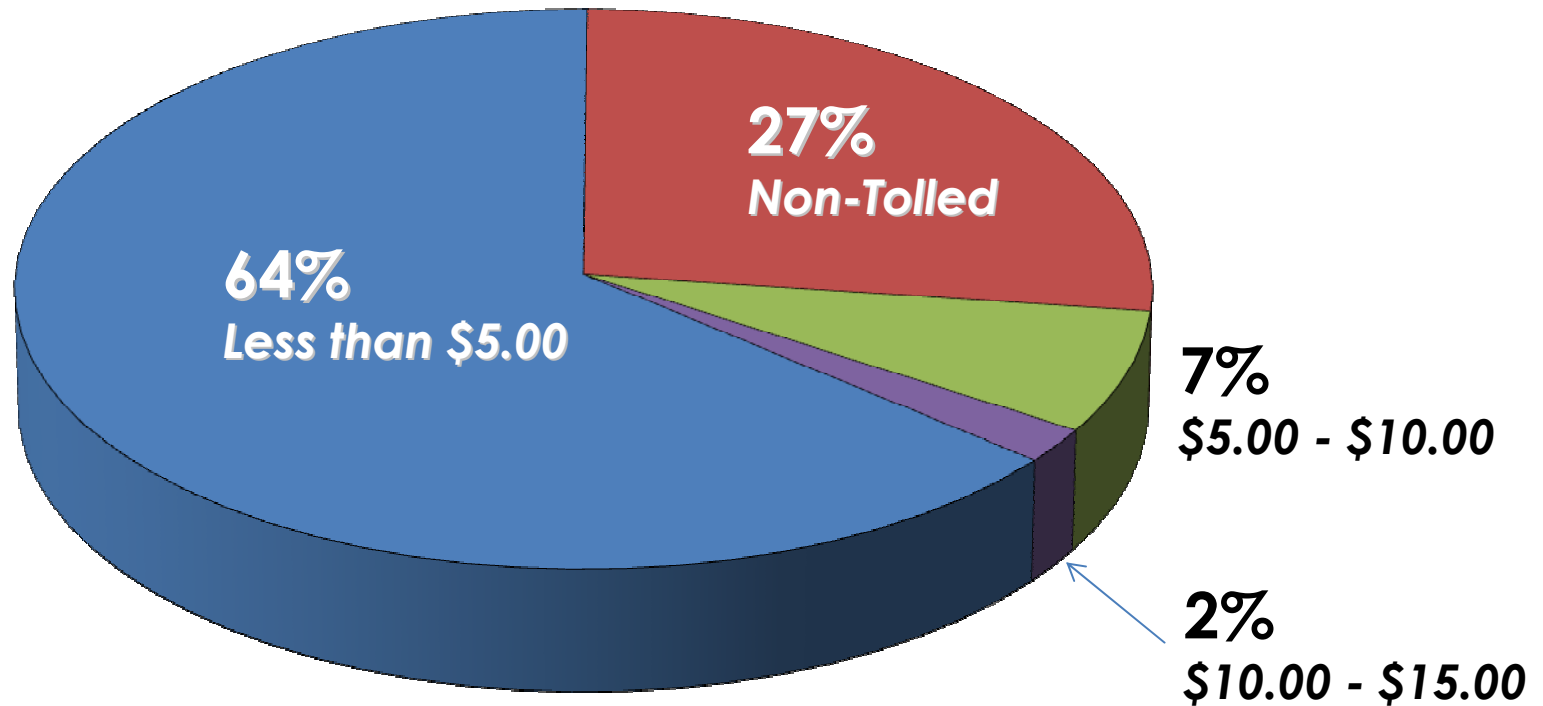
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- HOT Lane will be dynamically priced so toll price will be based on congestion levels.
- Dynamic pricing enables the HOT Lane to provide reliable travel times with peak hour speeds averaging 45+mph.
- The estimated average trip length is 6-7 miles, with typical toll prices ranging from \$.60 to \$6.00 depending on congestion.
- It is estimated that over 90% of customers will pay less than \$5.00 for their HOT Lane trip.
- It is estimated that over 25% of customers will use the HOT Lane toll free.

# Pricing and Toll Range

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**Estimated Weekday Average Toll Opening Year 2011**





# HOT Lane Success Stories

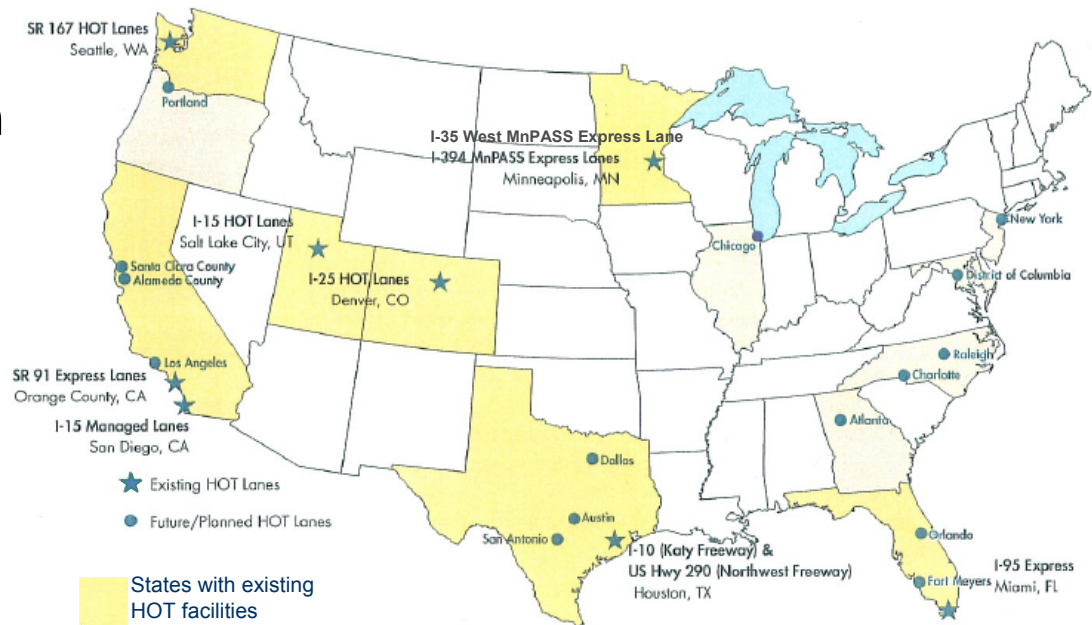
Map of HOT Lane Projects in the U.S.

## Minneapolis' MnPASS:

Speeds of 50+ mph are maintained over 95 percent of the time

## Seattle's HOT Lane:

Flows freely during all hours of operation at speeds of 50 to 55 mph





# How Do I Provide Input?

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The Department would like to hear your comments on this project. Methods in which to provide comments:

- Filling out comment cards available at this meeting
- Providing your comments verbally to a court reporter at this meeting
- Sending an email to [hotlanecomment@jacobs.com](mailto:hotlanecomment@jacobs.com)
- Submit a comment through the project website at [www.dot.ga.gov/I85HOTlanes](http://www.dot.ga.gov/I85HOTlanes)

We would like to receive your comments by November 23rd so they can be addressed in a timely manner.

Additional Information at:  
[www.dot.ga.gov/I85HOTlanes](http://www.dot.ga.gov/I85HOTlanes)



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Thanks for Attending!

